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Work Characteristics and Parent-Child Relationship Quality: The Mediating Role of Temporal Involvement

This study investigated whether the amount and nature of parent-child time mediated the association between parental work characteristics and parent-child relationship quality. We based hypotheses on the conflict and enrichment approaches, and we tested a path model using self-collected data on 1,008 Dutch fathers and 929 Dutch mothers with school-aged children. Longer working hours and less work engagement were associated with less parent-child time and longer working hours, more restrictive organizational norms, stress, flexibility, nonstandard hours (mothers only), and work engagement increased the disturbance of parent-child activities. Less and more disturbed parent-child activities were, in turn, associated with a lower parent-child relationship quality. In addition, work engagement and working hours had direct, beneficial effects on parent-child relationship quality.

In Western societies, parental employment, and maternal full-time employment particularly, are often considered detrimental for the parent-child relationship, especially when children are young (Bianchi, Robinson, & Milkie, 2006).

It has been argued that paid work harms the parent-child relationship because it restricts parents' available time and attention for children. Even though research has shown that this claim is largely unjust (Bianchi, 2000), the exact mechanisms that link parental paid work to the parent-child relationship need further examination. So far, studies on the impact of work demands on family life have focused either on the time spent with the family (e.g., Bianchi et al., 2006) or on aspects of the quality of family relationships, such as marital satisfaction and parent-adolescent conflict (e.g., Crouter, Bumpus, Head, & McHale, 2001; Schoen, Rogers, & Amato, 2006). Although the association between the two outcomes has seldom been considered, we argue that parents who face high work demands may have lower quality family relationships because their work restricts them from spending quality time with their family. This mechanism has been studied for the marital relationship (e.g., Poortman, 2005) but not for the parent-child relationship.

Expanding the current literature, we address the following research question: Do the amount and nature of parent-child activities mediate the association between parental work characteristics and parent-child relationship quality? In addition to studying the amount of time that parent and child spend together, we argue that the nature of joint time is relevant and that the parent-child relationship is more likely to benefit from activities that are more focused on the child and less interrupted by other activities.

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We further contribute to the literature through our conceptualization of paid work. Previous research has focused mostly on paid working hours, but work is more than spending time away from home (MacEwen & Barling, 1991). For example, job insecurity and stress take time, energy, and attention away from the family as well. We therefore consider a wider range of work characteristics that are commonly examined in the literature on the family friendliness of organizations, namely the organizational culture, job insecurity, stress, flexibility, non-standard working hours, and work engagement (e.g., Mauno & Kinunnen, 1999; Presser, 1994; Thompson, Beauvais, & Lyness, 1999). We found this specific selection to be relevant for families in previous research and to encompass work experiences, as well as the psychological, normative, and temporal features of a job.

A final asset of this study is the inclusion of both fathers and mothers. Previous research on work and parent-child time has focused on mothers and has largely overlooked paternal employment. Yet fathers have increased their share of child care in recent decades (Bianchi, 2000; Sociaal en Cultureel Planbureau, 2006), and their involvement benefits children's well-being (Amato & Rivera, 1999). The inclusion of fathers also enables us to examine gender differences.

BACKGROUND

Many studies have found that work characteristics and parenting behavior are interrelated. Most studies have taken the work-stress perspective (Menaghan & Parcel, 1990), focusing on the detrimental effects of parental work, and have found that work stressors are associated with more parental role overload, withdrawal, and parent-adolescent conflict and with less parental nurturing behavior and parental acceptance (e.g., Crouter, Bumpus, Head et al., 2001; Crouter, Bumpus, Maguire & McHale, 1999; Larson, Wilson, & Beley, 1994; Repetti, 1994). Studies based on the work-socialization perspective have found that the family can also benefit from paid work (Menaghan & Parcel, 1990). Parents with more complex and challenging jobs show sounder parenting behavior and provide a more intellectual and physically suitable home environment for their children (e.g., Menaghan & Parcel, 1990; Perry-Jenkins, Repetti, & Crouter, 2000). A limited number of studies on paid work and the parent-child relationship specifically

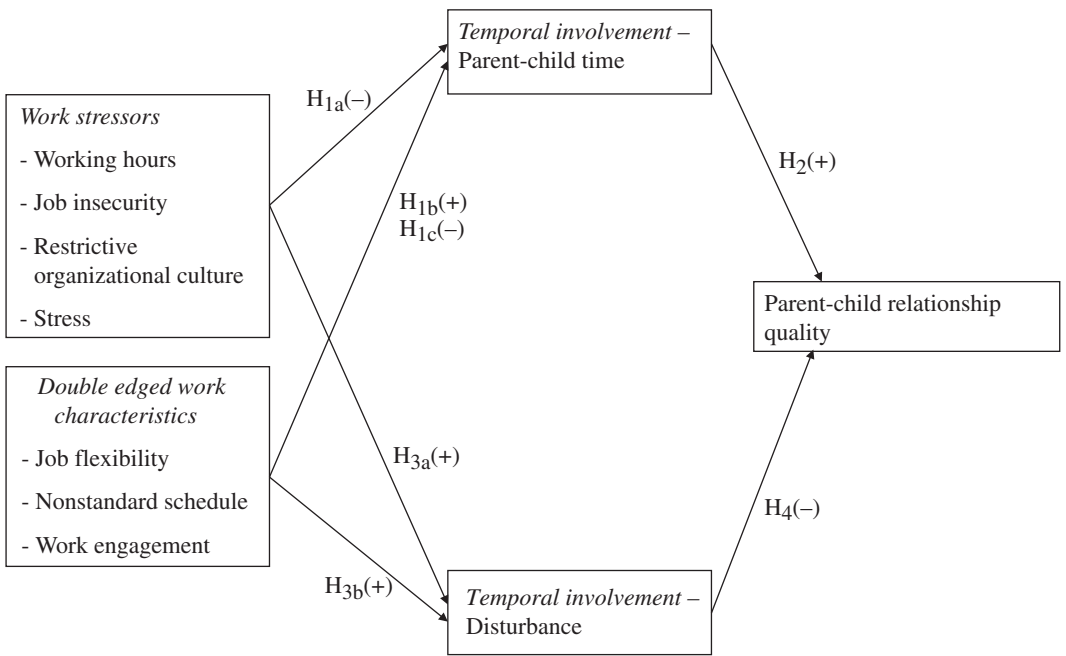
examined couples (Perry-Jenkins et al., 2000). For example, Bumpus, Crouter, and McHale (1999) found that work stressors decreased parents' knowledge of their children only when marital quality was low. With regard to the effects of work on the quality of the parent-child relationship, research is scarce. An exception is the study of Rogers and White (1998), who found that parents' employment status and schedule did not affect parent-child relationship quality.

The effects of parental work on parenting behavior have been found to be mediated by parental well-being (e.g., Galambos, Sears, Almeida, & Kolaric, 1995; MacEwen & Barling, 1991; for a review, see Perry-Jenkins et al., 2000). For example, Bumpus, Maguire et al. (1999) found that parental work pressure increased parental role overload, which, in turn, increased parent-adolescent conflict. Parental work does not only affect the parent's well-being, however; it also affects how much time parents spend with their children (Bianchi, 2000). Because the time parents spend with their children is a likely antecedent of the quality of the parent-child relationship (Huston & Rosenkrantz Aronson, 2005), we expect that joint parent-child time is a relevant mediator in the association between parental work and the parent-child relationship. We did not come across studies that examined parent-child time as a possible mediator, although two studies have addressed this possibility indirectly. First, Crouter, Bumpus, Head et al. (2001) studied the impact of parental work overload on both father-adolescent time and conflict. They found an effect of work overload only on conflict, and from that they concluded that joint time did not mediate the association between work overload and father-adolescent conflict. Second, Huston and Rosenkrantz Aronson (2005) found that employed mothers spent less time with their infants than did nonemployed mothers, and this decreased the mother-child relationship quality. We thus propose that the effects of parental work characteristics on parent-child relationship quality are indirect and run via the amount and nature of parent-child activities.

Theoretical Framework

The mediating effect of parent-child time. Hypotheses on the effects of parental work characteristics on parent-child time can be derived from the two central theoretical

FIGURE 1. CONCEPTUAL MODEL.



approaches in the literature: the conflict approach and the enrichment approach. The conflict approach (Greenhaus & Beutell, 1985) states that time, attention, and energy are scarce resources that have to be divided between work and family. More demanding work characteristics therefore reduce the amount of parent-child time. Most empirical studies have focused on the impact of paid working hours and found that these reduce the time spent with children (e.g., Bianchi, 2000; Bianchi et al., 2006; Brayfield, 1995; Coverman, 1985). Nevertheless, the effects were small and sometimes even absent (e.g., Crouter, Bumpus, Maguire et al. 2001; Nock & Kingston, 1988). In addition to paid working hours, we argue that a restrictive organizational culture, job insecurity, and stress are work stressors as well because they too absorb time, energy, and attention. Previous research has suggested that these work characteristics decrease individual well-being (e.g., Thompson et al., 1999; Van der Lippe, 2007), which is likely to restrict parents' attention and energy at home and cause them to be less tuned in to their children's needs. We therefore expect that longer working hours, more restrictive organizational norms, job insecurity, and stress are

associated with a lower frequency of parent-child activities (H1a). Figure 1 depicts this hypothesis.

Not all work characteristics can be labeled "work stressors." The enrichment approach (Greenhaus & Powell, 2006) proposes an alternative model that focuses on positive effects across roles. Skills, abilities, and values that are acquired in the work domain and positive experiences at work that increase a parent's general well-being can improve interactions at home (Greenhaus and Powell, 2006). When parents come home from work energetic instead of tired, they are more likely to feel like playing with their children rather than, for example, let the children watch television while reading the newspaper. As such, positive work experiences enhance the frequency of parent-child activities. A job can also offer resources that facilitate the combination of work and care. On the basis of this approach, it could be argued that facilitating work characteristics enhance parents' time and energy availability, and are therefore likely to increase the frequency of parent-child activities. Parents who work nonstandard hours and with more flexible jobs can arrange their work in such

a way that they match their hours to their children's needs and availability. Moreover, work engagement or flow is likely to increase parental well-being and create energy that enhances parent-child activities (Bakker & Geurts, 2004).

Despite the likely beneficial aspects of job flexibility, nonstandard hours, and work engagement, arguments from the conflict approach may pertain to the above-mentioned work characteristics as well. Nonstandard schedules create challenges because parents who work such schedules regularly work during family hours on evenings and weekends (Presser, 1994). Similarly, job flexibility erodes the boundaries between work and family (Peters & Van der Lippe, 2007). And although work engagement is likely to create energy, it also increases work commitment, which could come at the expense of commitment to the family (Bielby, 1992). Because arguments from both the enrichment and the conflict approach apply, we formulate two competing hypotheses for these double-edged work characteristics: More job flexibility, working nonstandard hours, and more work engagement are associated with a higher frequency of parent-child activities, according to the enrichment approach (H1b) or with a lower frequency of parent-child activities, according to the conflict approach (H1c).

It is generally assumed that parents who spend more time with their children develop a better relationship with them (e.g., Hays, 1996; Hochschild, 1997). Both attachment theory (Hill, 1988) and self-expansion theory (Ickes & Duck, 2000) argue that spending time together raises mutual understanding. Moreover, joint activities can be considered relationship-specific investments that strengthen mutual commitment (Hill, 1988). Although the association between joint time and relationship quality has been investigated for the marital relationship (e.g., Claxton & Perry-Jenkins, 2008), this is much less the case for the parent-child relationship. Nevertheless, Huston and Rosenkrantz Aronson (2005) found that mothers who spent more time with their children showed more nurturing maternal behavior, although there was no effect on the child's engagement. Moreover, contact and affection between parents and adult children are both dimensions of intergenerational solidarity (Bengtson & Roberts, 1991). We thus expect that a lower frequency of parent-child activities is

associated with a lower parent-child relationship quality (H2).

The mediating effect of the nature of parent-child time. Time-use research showed that people—women in particular—often multitask and that secondary activities affect the nature of primary activities (e.g., Bianchi et al., 2006; Mattingly & Bianchi, 2003). A child-related activity that is combined with a work-related activity has a different nature from that of an activity solely focused on the child. *Contamination* refers to the occurrence of secondary activities. For example, a parent-child activity is contaminated when a parent is ruminating about a work-related problem while playing with his or her children. A second aspect of the nature of time is *fragmentation* (Bittman & Wacjman, 2000, Mattingly & Bianchi, 2003). A child-related activity is more fragmented when the episodes are short because of interruptions by other activities, such as a phone call from work. Although studies on the impact of mothers' employment status on the contamination and fragmentation of leisure yielded mixed results (Bittman & Wacjman, 2000), Mattingly and Bianchi (2003) found that more working hours reduce the quality of leisure activities because they are more contaminated and fragmented.

On the basis of the conflict and enrichment approaches, we expect that work experiences are more likely to spill over to the family domain and disturb parent-child time when a job absorbs more time, energy, and attention. The term *disturbance* refers to both contamination and fragmentation. With regard to work stressors, we expect that jobs that are "greedier" put a larger claim on family life, forcing parents to be strongly involved in their work and constantly stay updated. This may cause parents to invest more mental energy in their work, even when they are interacting with their children. It may also be more difficult for such parents to buffer work encroachments. For example, when a mother comes back from work late, she has less time to regain her energy, which may make it difficult to focus on her children without thinking about work. Similarly, when a manager shows little family support and expects employees to work during the weekend, his or her employees are more likely to work or be preoccupied with work during the weekend. We therefore expect longer hours, more restrictive organizational norms, job insecurity, and stress to be

associated with more disturbance of parent-child time (H3a).

We further presume that double-edged work characteristics increase the disturbance of parent-child time. Work may interfere more with family activities when nonstandard hours and flexibility make it more difficult to separate paid work and family life. Moreover, parents who are more engaged in their work may be more inclined to take their work home. We thus hypothesize that more flexibility, nonstandard hours, and more work engagement are associated with more disturbance of joint parent-child activities (H3b).

Previous research studied contamination and fragmentation not as antecedents, but as outcomes, and simply assumed that more disturbance results in less quality time with detrimental outcomes for those involved (e.g., Mattingly & Bianchi, 2003). We expect parents to establish higher quality relationships with their children when joint activities are less disturbed by work. A stronger focus on the child improves communication and enables parents to tune in to their children's needs. Moorehouse (1991) indeed found that children did better in school when mother-child activities were more child focused. The final hypothesis therefore is that more disturbance of parent-child time is associated with a lower parent-child relationship quality (H4).

The theoretical expectations, discussed above, can be combined, which results in a conceptual model as presented in Figure 1. Because previous research has consistently showed that men and women respond differently to the demands from work and the family (e.g., Bielby, 1992; Galambos et al., 1995; Hochschild, 1997), we distinguished between fathers and mothers in our analyses. As this study is the first to disentangle the association among work characteristics, joint time, and parent-child time, we focus on how parents' work characteristics affect parents' relationships. Because we acknowledge that parents are likely to affect each other's involvement in the family (e.g., Brayfield, 1995), we explored how the interdependency between the partners affected the results in an additional model. We controlled for standard family characteristics: age of the youngest child, number of children in the household, whether the youngest child is an adolescent, the parents' relationship status, and educational level. Children demand close supervision and attention when they are young,

and joint time and relationship quality decrease when children reach adolescence (Crouter, Bumpus, Head et al., 2001). More children and being single increase family demands and overall parent-child time. We also controlled for the parent's educational level, as more educated parents have been found to invest more in their children's upbringing (Bianchi et al., 2006).

METHOD

We tested the hypotheses with Dutch household data collected in the spring of 2007 through a computer-based e-mail survey. Recruited through the Taylor Nelson Sofres – Netherlands Institute for Public Opinion (TNS-NIPO) Household Panel, more than 200,000 households were involved. Households without access to the Internet were provided with a computer. Because of the large panel size, we could approach a sample that was representative in terms of work arrangements, gender, and educational level. Nevertheless, the data underrepresent ethnic minorities, and it is likely that respondents facing very high work and family demands did not take part in the panel because of those demands.

Of the 4,912 parents with minor children who were contacted, 2,816 (57.3%) filled out the questionnaire. Although this response rate is low in comparison with the United States, it complies with what is common in The Netherlands (Stoop, 2005). We selected the final sample in two steps. First, we selected parents with school-aged children (i.e., 4–18 years old) because we expected little meaningful variation in parent-child relationship quality for babies and toddlers. This excluded 763 parents (27.1%) of the initial sample. Second, we selected parents in paid employment, excluding another 116 parents (8.1%) from the sample. The final sample consisted of 1,008 fathers and 929 mothers. In 583 cases, both partners of the same household were in the data set. We dealt with the nested structure of the data by running separate models for the fathers and mothers.

Measures

Independent variables. Our model included seven work characteristics. Paid working hours (including overtime) were measured by asking respondents how many hours they worked in the week preceding the survey. We assessed restrictiveness of the work-family culture using

a shortened version of the Family Friendliness scale (Thompson et al., 1999). We took the mean score over 12 items (e.g., "In the event of a conflict, managers are not understanding when employees have to put their family first"), each ranging from 1 = *totally disagree* to 5 = *totally agree*. Higher values indicated more restrictive norms. The α was .89 for fathers and .88 for mothers. Job insecurity was measured with five items, such as "I am worried that I will lose my job" (Crompton, Lewis, & Lyonette, 2007), with answer categories ranging from 1 = *totally disagree* to 5 = *totally agree* (α = .80 for fathers and .81 for mothers). A higher score on the scale indicated more job insecurity. Stress was based on the scale developed by Pearlin and Schooler (1978) and included seven items. Respondents were asked to think about their job and indicate how often they felt annoyed, concerned, tensed, unhappy, frustrated, satisfied (reversed), and relaxed (reversed) (1 = *never* to 5 = *always*) (α = .86 for fathers and .85 for mothers). Taking the mean score resulted in a final scale with higher values indicating more stress. The scale for job flexibility was based on two questions: "To what extent do you determine when you start and end work?" (1 = *others fully determine this* to 5 = *I fully determine this*) and "When something unexpected happens, is it possible for you to take time off or work from home?" (1 = *this is impossible* to 5 = *this is very well possible*). The correlation between the answers was .25 for fathers and .32 for mothers. The respondents were assigned a 1 on the dummy variable nonstandard hours when they worked rotating shifts or when they reported working during evenings, nights and weekends on a regular basis and a 0 when they did not. Work engagement, finally, was measured with six items related to the enjoyment of their job, such as "I feel full of energy at work" and "My work inspires me" (Crompton et al., 2007). The α was .93 for both fathers and mothers. Higher values corresponded with more engagement.

Mediating variables. To measure the frequency of joint activities, respondents were asked to rate how often they participated in a range of child-related activities, such as having dinner and watching television together, in the week preceding the survey. This type of question is similar to the "estimated daily activities with

children" measure (Bianchi et al., 2006, p. 79) and was assessed for 18 one-on-one parent-child activities (without the partner) and 10 family activities (in which the partner participated as well). The response categories ranged from 0 = *never* to 6 = *more than three times per day*. We constructed the final measure by taking the mean score (α = .88 for fathers and .89 for mothers), which resulted in a score ranging from 0 (low frequency) to 6 (high frequency). We replicated the time-diary measures of contamination and fragmentation through a self-developed scale, which asked parents how often their attention was directed to work while spending time with their children and how often work-related activities interrupted their activities with their children. This scale on disturbance of parent-child activities consisted of seven items, such as "While I am interacting with my children I often think about work" and "Activities with my family are often interrupted because my work contacts me." The α was .78 for fathers and .74 for mothers. A higher score indicated a higher level of disturbance by paid work.

Dependent variable. We measured parent-child relationship quality with six questions, based on a scale developed by Rogers and White (1998). Examples are "How well is the overall relationship with your children?" and "How close do you feel to your children?" The questions had five answer categories (e.g., ranging from *not well* to *very well* for the first example). The reliability of the scale was good, with α of .78 for fathers and .79 for mothers. The scores on the parent-child relationship items were negatively skewed. We performed a log transformation to reduce the skew, but this did not alter the results. We therefore decided to include the original, nontransformed variables in the model.

Control variables. We included as controls number of children, age of the youngest child, a dummy variable indicating whether the youngest child is an adolescent (0 = *no*, 1 = *yes*), and educational level of the parent (ranging from 1 = *primary school unfinished* to 11 = *Ph.D. degree*). We also controlled for type of household and structure of the data by including dummies indicating whether the respondent was a single parent (0 = *married or cohabiting*, 1 = *single*) and (if applicable)

whether the respondent’s partner participated in the survey as well (0 = *yes*, 1 = *no*).

Method of Analysis

Structural equation modeling provided us with the opportunity to test the entire path model and to include a measurement model for our main latent variables, relationship quality and disturbance of joint time. To keep the model parsimonious, the frequency of joint activities and the independent variables were included as item parcels. We used AMOS to estimate the models (Arbuckle, 2006); AMOS automatically deals with missing values, excluding the respondents with missing data on a particular variable in the estimation of the equations in which this variable is included.

We based our analytical strategy on the suggestions of Shrout and Bolger (2002). They argued that, when there are theoretical reasons to expect that the mediation process is distal rather than proximal, one can immediately examine the indirect effects in a mediation model, without testing the direct effects first as other analytical strategies do. This argument applies because it is unlikely that changes in

work characteristics have an immediate effect on the relationship quality. The relationship quality is grounded in past experiences and depends on many factors in the family domain; therefore, a change in work characteristics may have no direct consequences for relationship quality. Because it is unlikely to detect an overall effect, it is unnecessary to test this. Immediate testing of indirect effects in a path model also makes it possible to detect suppressor effects. For example, the beneficial effect of work engagement on relationship quality, as Hypotheses 1b and 2 predict, may cancel out the detrimental effect predicted by Hypotheses 3a and 4—this would become apparent when a path model is estimated.

RESULTS

Descriptive and Bivariate Analyses

Table 1 presents the descriptive statistics of the variables in the model as well as the *p*-values of the *t*-tests of gender differences. The parents in the sample had an average of slightly less than two children and the average age of the youngest child was around 11 (*M* = 11.18 for fathers and *M* = 10.63 for mothers). The youngest child

Table 1. Family Variables, Work Variables, and Control Variables: Descriptive Statistics (*N*_{fathers} = 1,008; *N*_{mothers} = 929)

	Fathers			Mothers			<i>t</i> Test ^a
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	
Parent-child relationship quality	1,008	3.83	.48	929	3.96	.49	.000
Frequency of joint activities	1,008	1.77	.43	929	1.91	.52	.000
Disturbance	1,008	2.57	.45	929	2.49	.43	.000
Working hours	1,008	39.53	11.92	929	22.61	12.73	.000
Restrictiveness culture	913	1.65	.63	815	1.53	.60	.000
Job insecurity	1,008	2.35	.77	929	2.39	.76	.000
Stress	1,008	2.11	.57	929	2.01	.55	.000
Flexibility	913	2.97	1.01	815	2.76	.99	.000
Nonstandard hours ^b	1,008	.40	.49	929	.42	.49	.379
Work engagement	1,008	3.42	.85	929	3.45	.85	.438
Age youngest child	1,008	11.18	4.45	929	10.63	4.28	
Number of children	1,008	1.91	.79	929	1.86	.78	
Adolescent ^c	1,008	.50	.50	929	.47	.50	
Educational level	1,008	6.43	1.97	929	6.29	1.82	
Single parent ^d	1,008	.07	.25	929	.07	.26	
Nonresponding partner ^e	942	.29	.46	864	.28	.45	

^a *p* value of *t* test for equality in means of the fathers and mothers. ^b 0 = Respondent works standard hours, 1 = respondent works nonstandard working hours. ^c 0 = Youngest child is 11 years old or younger, 1 = youngest child is 12 years or older. ^d 0 = Respondent has a partner, 1 = respondent is a single parent. ^e 0 = Respondent’s partner also participated, 1 = respondent’s partner did not respond (if applicable).

Table 2. Correlations Between Independent and Dependent Variables for Fathers and Mothers (Fathers Under Diagonal, Mothers Above Diagonal; $N_{\text{fathers}} = 1,008$; $N_{\text{mothers}} = 929$)

	1	2	3	4	5	6	7	8	9	10
1. Relationship quality	—	.33***	.05	.07*	-.04	-.09**	-.12***	.04	.05	.16***
2. Frequency of parent-child activities	.33***	—	-.06†	-.12***	-.00	-.06†	-.045	.03	-.06*	.07*
3. Disturbance	-.07*	-.07*	—	.27***	.14***	.07*	.12***	-.00	.18***	.13***
4. Working hours	-.01	-.14***	.29***	—	.02	-.09**	-.16***	.03	.10**	.18***
5. Restrictiveness organizational culture	-.08*	-.02	.15***	.12***	—	-.36***	-.37***	-.05	-.02	.32***
6. Job insecurity	-.15***	-.03	.03	-.06*	.17***	—	.27***	.14***	-.05	-.24***
7. Stress	-.14***	-.04	.11***	.012	.36***	.40***	—	-.13***	.01	-.46***
8. Flexibility	.05	.01	.12***	-.02	-.24***	-.29***	-.12***	—	-.28***	.05
9. Nonstandard hours	.00	.03	.05	.21***	.07*	.01	.02	-.22***	—	.06
10. Work engagement	.19***	.05	.17***	.14***	.30***	-.36***	-.53***	.19***	.06	—

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

was an adolescent in about half the families, and the average educational level was about 13 years of education. Mothers reported significantly higher levels of parent-child relationship quality than did fathers and participated more in activities with their children. They also reported fewer disturbances of parent-child activities, but the difference with fathers was small. Finally, mothers worked significantly fewer paid hours; reported less restrictive work-family norms, stress, and flexibility than fathers; and experienced slightly more job insecurity.

Table 2 shows the correlations for the fathers and mothers separately. The results for fathers (located under the diagonal) show that the father-child relationship quality was positively associated with the frequency of father-child activities and negatively associated with the level of disturbance. The correlations were highly similar for mothers (located above the diagonal). Nevertheless, in contrast to fathers, the mother-child relationship did not yield an association with the disturbance of parent-child activities.

Explanatory Analyses

Figures 2 and 3 present the results of the structural equation model for fathers and mothers, respectively. The model for fathers had a good fit, with a chi-square of 611.293 (230 degrees of freedom [df]), a comparative fit index (CFI) of .954, and a root mean square error of approximation (RMSEA) of .041. The fit of the model for the mothers was reasonable to good,

with a chi-square of 639.354 ($df = 230$), a CFI of .941, and a RMSEA of .044. The models explained 26% and 27% of the variance for fathers and mothers, respectively.

For both fathers and mothers, working hours and work engagement were associated with the frequency of parent-child activities (Hypotheses 1a – 1c). Parents participated less in these activities when they worked longer hours and experienced fewer work engagements. The frequency of mother-child activities was also lower when mothers worked nonstandard hours. The positive effects of work engagement and nonstandard hours supported Hypothesis 1b and rejected Hypothesis 1c. The second part of the model shows that parents who reported higher frequencies of parent-child activities reported better parent-child relationship quality. This confirmed Hypothesis 2. Thus, paid working hours and work engagement had an indirect effect on the relationship quality, through the amount of joint time. Working nonstandard hours also yielded an indirect effect for mothers.

In line with Hypothesis 3a, parent-child activities were more disturbed when parents worked longer hours, the organizational culture was more restrictive, and stress was higher. Job insecurity was not associated with the nature of joint time, for neither fathers nor mothers. With regard to double-edged work characteristics, the results showed that the level of disturbance was higher when parents experienced more flexibility and reported more work engagement. Nonstandard hours yielded an additional, positive effect for mothers.

FIGURE 2. RESULTS OF THE STRUCTURAL EQUATION MODEL FOR FATHERS.

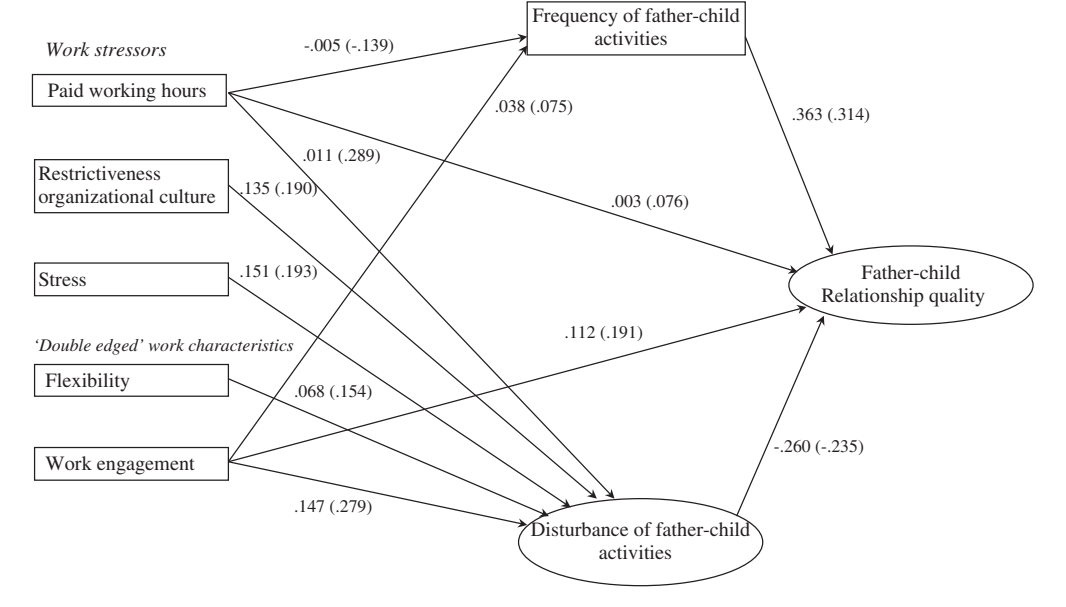
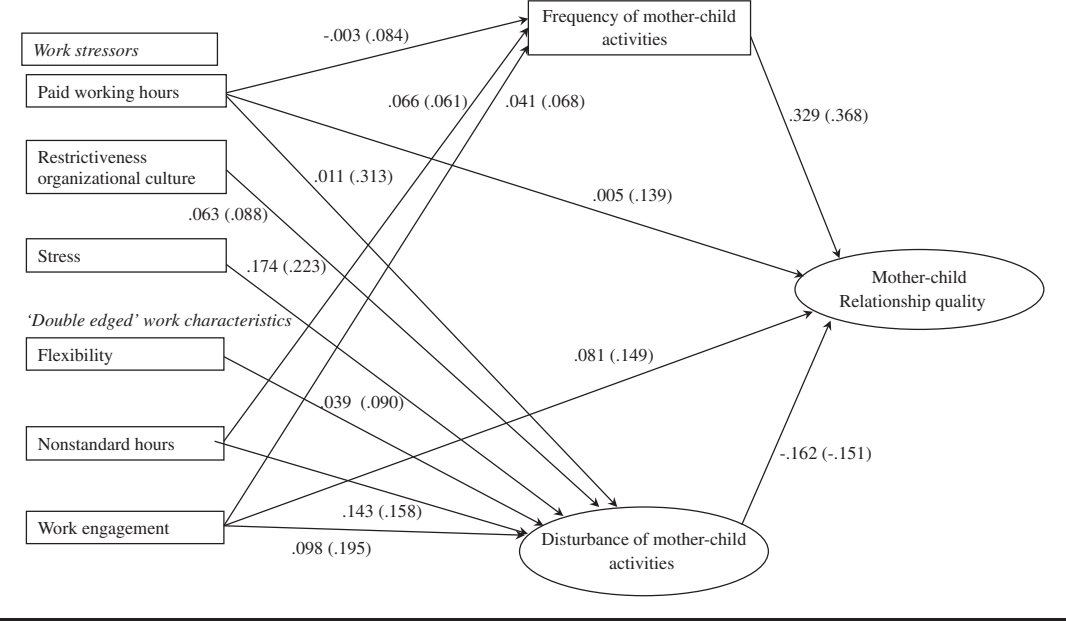


FIGURE 3. RESULTS OF THE STRUCTURAL EQUATION MODEL FOR MOTHERS.



Hypothesis 3b therefore is largely confirmed. Hypothesis 4 predicted that the disturbance of parent-child activities was negatively associated with the parent-child relationship. Paid working hours, the restrictiveness of the organizational

culture, stress, level of flexibility, nonstandard hours (for mothers only), and work engagement thus yielded an indirect effect on the parent-child relationship quality, through the disturbance of parent-child activities.

A few work characteristics affected the relationship quality directly. Controlling for the amount and disturbance of parent-child time, parent-child relationship quality was better when parents worked longer hours and reported more work engagement.

Additional analyses. To test whether the interdependency between the coupled fathers and mothers affected the results, we ran an additional model in which we estimated the models for fathers and mothers simultaneously, and we added covariances between the father's and the mother's parent-child time, disturbance, and parent-child quality (results not reported). The estimates in that model did not show any substantial differences from the separate models, which implies that interdependency between partners did not affect the associations between the constructs in our conceptual model. Moreover, we combined the models for fathers and mothers in a multigroup analysis and tested whether setting equality constraints on the paths for the fathers and mothers altered the results. The model deterioration was significant, which implies that the models for fathers and mothers were significantly different. This had only a minimal impact on the effects, however. The significance levels of the effects decreased and the effects of nonstandard hours that were significant only for mothers were significant for the full model. Finally, we tested whether the effects of paid working hours were nonlinear, but including the working hours squared did not result in a significant improvement of the model, which suggests that the effects are similar for part-time and full-time employed mothers.

DISCUSSION

The results of this study indicate that the time parents spend with their children plays a central role in the mechanisms that link parental paid work and the parent-child relationship quality. The effects of paid work on the parent-child relationship quality ran largely through parents' temporal involvement. Parents who worked longer hours and experienced less work engagement spent less time with their children, and that decrease in joint time, in turn, resulted in a lower relationship quality. The results also implied that it was not merely the amount of time that mattered but also how that time was spent. When parent-child activities were less focused on the

child, because parents were preoccupied with or interrupted by their work, the quality of the parent-child relationship was lower. Work characteristics that make a parent's job greedier and that increased the disturbance of parent-child time were paid working hours, restrictiveness of the organizational culture, flexibility, stress, and work engagement. Although previous research on the work-family interface has provided ample evidence for the existence of gender differences (e.g., Bianchi et al., 2006), we found that fathers and mothers responded to these work characteristics in surprisingly similar ways. Apparently, fathers and mothers are more similar than different when it comes to the effects of paid work on the relationship with their children.

Our theoretical framework incorporated insights from the conflict and the enrichment approaches, and the results provided evidence for both. The detrimental effects of paid working hours, restrictive organizational norms, stress, and flexibility suggest that these work characteristics deplete family life. Although job flexibility is generally considered a resource rather than a work demand, it can also harm family life by eroding the boundary between the work and the family domains (Peters & Van der Lippe, 2007). The results for the other work stressors were less clear cut. First, mothers who worked during nonstandard hours spent more time with their children, but their mother-child activities were more disturbed by work. Work engagement, second, was a particularly interesting case. Engagement harmed the parent-child relationship quality because it increased the level of disturbance while benefitting the relationship quality, both directly and indirectly through the amount of parent-child time. Finally, paid working hours harmed parent-child relationship quality by decreasing the amount and increasing the disturbance of parent-child time, but parents who worked more hours also reported higher quality parent-child relationships. This may reflect a beneficial effect of multiple role combination (Greenhaus & Powell, 2006; Huston & Rosenkrantz Aronson, 2005), and this finding again stresses the importance of including both the enrichment and the conflict approaches in the study's theoretical framework.

Because the data were self-reported and cross-sectional, we cannot exclude certain alternative explanations for the results. The parent-child relationship is a sensitive issue and a survey on this topic may elicit socially desirable answers.

Because we did not have any child data, we could not validate the reports of the parents, nor could we check for common method variance. Moreover, it is possible that the parent-child relationship quality affects the amount and nature of joint time, as parents are likely to spend more quality time with their children when affection is higher (Bengtson & Roberts, 1991). Also, the association between disturbance and relationship quality may be confounded if a third unmeasured variable, such as negative affectivity, affects both. Similarly, work involvement and involvement in the family may be determined simultaneously and have common causes, such as certain personality traits or socioeconomic characteristics. Furthermore, selection effects could (partly) account for the findings in this study: Parents can purposively select a job that accommodates their strong involvement with their children. Previous research showed that especially mothers are likely to do so (e.g., Becker & Moen, 1999), and it has been argued that this is likely to buffer the effects of work (Bianchi et al., 2006). The risk of selection effects is particularly high in The Netherlands, where part-time jobs are widely accessible and maternal full-time employment is generally considered harmful for children (Sociaal en Cultureel Planbureau, 2006). A cross-national study that would consider differences in social policies and cultural norms could provide more insight in the implications for the impact of paid work on family life.

To conclude, our study has provided new insights into the mechanisms that link paid work to family outcomes. Whereas previous research considered parent-child time and the quality of the parent-child relationship as separate outcomes, our results suggest that parental work influences the parent-child relationship via the amount and, especially, the nature of joint parent-child time. Moreover, we showed that certain work characteristics both benefit and harm relationship quality. For example, work engagement led to more parent-child time, improving the parent-child relationship, but at the same time it resulted in more disturbed parent-child time, which lowered the parent-child relationship. Applying a sociological time-use perspective appeared useful in revealing new pathways that link paid work to the quality of family relations, and this approach promises to be fruitful in explaining other family phenomena, such as child well-being. Another interesting avenue for future research would be

to explore within-couple processes and examine whether relationships in the family depend on the combination of the work characteristics of the father and mother.

NOTE

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